

## CLAIMS

(44)

1. A method for deforming a workpiece, such as a metal cylinder or plate (3), by means of a tool, in particular one or more forming rollers (5), wherein the workpiece (3) and/or the tool (5) are rotated about an axis (4) relative to each other, the tool (5) moves through one or more deforming curves and at least part of the workpiece (3) is deformed, characterized in that values of one or more coordinates of the position of the extreme edge of the workpiece (3) are measured during the deforming process, and that ~~one or more parameters of the deforming process is/are changed on the basis of the measured values.~~

~~2. A method according to claim 1, wherein the position and/or the shape of one or more of the deforming curves being passed through during the deforming process, the feeding rate and/or the rotational speed with which the tool (5) and the workpiece (3) are rotated relative to each other is/are changed on the basis of said measurement or measurements, with the proviso that, if the shape of one or more of the deforming curves is changed, no locally reduced portions will be locally imposed on the deformed portion.~~

~~2/3. A method according to claim 1 or 2, wherein said values are measured in a contactless manner.~~

~~3/4. A method according to any one of the preceding claims, wherein the values of one or more coordinates of the position of the extreme edge of the workpiece (3) are measured at least at the end of each pass, but preferably during the entire deforming process, and wherein preferably one or more parameters of the deforming process is/are continuously adjusted on the basis of the measured values.~~

~~4/5. A method according to any one of the preceding claims, wherein at least the extreme edge of the workpiece (3) is deformed on a forming tool, such as a mandrel (15) or a spindle (28).~~

~~5/6. A forming machine (1) for deforming a workpiece, such as a metal cylinder or plate (3), comprising a tool, in~~

particular one or more forming rollers (5), one or more driving means (10, 11) for moving said tool (5), a control unit (25) comprising a memory, which unit (25) is arranged for controlling the tool (5) during the deforming process at least on the basis of deforming curves, the feed rate and/or the rotational speed with which the workpiece (3) and the tool (5) are rotated relative to each other, which parameters are stored in the memory, characterized in that the forming machine (1) is furthermore provided with at least one detector (19) for measuring values of one or more coordinates of the position of the extreme edge of the workpiece (19) AND IN THAT

~~7. A forming machine (1) according to claim 6,~~  
 wherein the control unit is arranged for changing the position and/or the shape of one or more of the deforming curves being passed through during the deforming process, the feeding rate and/or the rotational speed with which the tool (5) and the workpiece (3) are rotated relative to each other on the basis of the measurement or measurements obtained by means of the detector (19) or detectors, with the proviso that, if the shape of one or more of the deforming curves is changed, no locally reduced portions will be imposed on the deformed portion.

~~6~~ 8. A forming machine (1) according to claim <sup>5</sup> ~~6~~ or ~~7~~,  
 wherein the detector (19) comprises a series of sensors.

~~7~~ 9. A forming machine (1) according to ~~any one of~~ CLAIM 5 or 6  
 the claims ~~6-8~~, comprising a forming tool, such as a mandrel (15) or a spindle (28), on which at least the extreme edge of the workpiece (3) can be deformed.

~~8~~ 10. A forming machine (1) according to claim <sup>7</sup> ~~8~~,  
 wherein the forming tool (15; 28) is provided with a stop (15), by means of which the length of at least a portion of the workpiece (3) can be determined.